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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,765	07/25/2000	Walid M. Ahmed	2925-0484P	7384

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EXAMINER

RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
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2665

9

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/624,765

Applicant(s)

AHMED ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 8, line 16 the phrase "SELF NODE ... IS-95A" is confusing and so should be amended or deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 discloses a first and a third threshold; however, there is no mention of a second threshold. For the purposes of prior art rejections, Examiner will interpret "a third threshold" to be "a second threshold".

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 discloses "a second threshold" where "a second threshold" was disclosed in claim 5, which claim 6 depends upon. It is unclear from the wording if the second threshold in claim 6 is the same second threshold disclosed in claim 5. For the purposes of prior art rejections, Examiner will interpret "a second threshold" in claim 6 to be "the second threshold".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-4, 12, and 13 are rejected under 35 U.S.C. 102(a) as being anticipated by Chheda et al (USPN 6,038,448).

7. Regarding claim 1, Chheda discloses a method of processing soft handoff information at a base station, comprising: receiving, at the base station, soft handoff information of a mobile station, the soft handoff information indicating at least a number of base stations in an active list of the mobile station, the active list being a list of base stations involved in a call of the mobile station (Fig. 9-11; col. 2, lines 39-48; col. 4, lines 4-7; and col. 14, line 3-col. 15, line 7, esp. col. 14, line 51-col. 15, line 7); applying a rules set to the soft handoff information to determine changes in the active list, the rules set requiring more stringent conditions be met to add a base station to the active list when the active list includes a first number of base stations as compared to when the active list includes a second number of base stations, the first number being greater than the second number; and sending determination results to the mobile station (col. 15, line 8-col. 16, line 49, esp. col. 15, lines 39-44 and col. 15, lines 52-61) where D2 is less stringent than D3 and D3 is less stringent than D3, D5, and D6.

8. Regarding claim 2, referring to claim 1, Chheda discloses that the applying step applies the rules set to base stations in a potentials list (candidate set), the potentials list being a list of base stations which are potential base stations for the active list (col. 7, lines 6-63 and col. 14, line 51-col. 16, line 49).

9. Regarding claim 3, referring to claim 2, Chheda discloses that the potentials list is the candidate list in IS-95 standards (col. 7, lines 6-63 and col. 14, line 51-col. 16, line 49).

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10. Regarding claim 4, referring to claim 1, Chheda discloses that the applying step moves a potential base station from the potentials list to the active list when the active list contains one base station and the potential base station has a signal strength greater than a first threshold (T-ADD) (col. 6, lines 9-34, esp. col. 6, lines 17-23 and col. 14, line 3-col. 16, line 44) where the signal strength being greater than T-ADD results in the mobile sending a PSMM where the PSMM is used by the base station to allocate signals to the active set.

11. Regarding claim 12, referring to claim 1, Chheda discloses that the first number is two or more, and the second number is 1 (col. 15, line 8-col. 16, line 49, esp. col. 15, lines 39-44 and col. 15, lines 52-61).

12. Regarding claim 13, referring to claim 1, Chheda discloses that the first number is three or more, and the second number is 1 (col. 15, line 8-col. 16, line 49, esp. col. 15, lines 39-44 and col. 15, lines 52-61).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chheda et al (USPN 6,038,448).

15. Regarding claim 5, referring to claim 4, Chheda suggests that the applying step moves a potential base station from the potentials list to the active list when the active list contains two or more base stations and the potential base station has a signal strength greater than a second

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threshold, the second threshold being greater than the first threshold (T-ADD) (col. 2, lines 8-25; col. 6, lines 9-34, esp. col. 6, lines 17-23; col. 8, lines 30-46; and col. 14, line 3-col. 15, line 61). Cheddha discloses using relative signal strengths rather than absolute signal strengths when having the network determine whether a potential base station should be added to the active set (col. 14, line 3-col. 15, line 61); however, Cheddha does recognize that the absolute signal strength, rather than the relative signal strength, could be used to make the determination (col. 8, lines 30-46) where absolute signal strengths are well known in the art (col. 2, lines 8-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to move a potential base station from the potentials list to the active list when the active list contains two or more base stations and the potential base station has a signal strength greater than a second threshold, the second threshold being greater than the first threshold (T-ADD) in order to have additional criterion with which to judge the potential base station.

16. Regarding claim 6, referring to claim 5, Chheda suggests that the applying step moves a potential base station from the potentials list to the active list when the active list contains three or more base stations, the potential base station has a signal strength greater than the second threshold (absolute signal strength) (col. 2, lines 8-25; col. 6, lines 9-34, esp. col. 6, lines 17-23; col. 8, lines 30-46; and col. 14, line 3-col. 15, line 61), and the signal strength of the potential base station is a third threshold greater than a signal strength of a base station in the active list (relative signal strength) (col. 14, lines 27-36).

17. Regarding claim 7, referring to claim 5, Chheda discloses that the signal strength of the base station in the active list is the weakest signal strength of base stations in the active list (col. 14, lines 27-36) where “each active set connection” includes the weakest connection.

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18. Regarding claim 8, referring to claim 4, Chheda suggests that the applying step moves a potential base station from the potentials list to the active list when the active list contains two base stations, the potential base station has a signal strength greater than the first threshold (T-Add) (col. 2, lines 8-25; col. 6, lines 9-34, esp. col. 6, lines 17-23; col. 8, lines 30-46; and col. 14, line 3-col. 15, line 61), and the signal strength of the potential base station is second threshold greater than a signal strength of a base station in the active list (relative signal strength) (col. 14, lines 27-36).

19. Regarding claim 9, referring to claim 8, Chheda discloses that the signal strength of the base station in the active list is the weakest signal strength of base stations in the active list (col. 14, lines 27-36) where “each active set connection” includes the weakest connection.

20. Regarding claim 10, referring to claim 4, Chheda suggests that the applying step moves a potential base station from the potentials list to the active list when the active list contains two or more base stations, the potential base station has a signal strength greater than the first threshold (absolute signal strength) (col. 2, lines 8-25; col. 6, lines 9-34, esp. col. 6, lines 17-23; col. 8, lines 30-46; and col. 14, line 3-col. 15, line 61), and the signal strength of the potential base station is greater than a signal strength of a base station in the active list (relative signal strength) (col. 14, lines 27-36).

21. Regarding claim 11, referring to claim 10, Chheda discloses that the signal strength of the base station in the active list is the strongest signal strength of base stations in the active list (col. 14, lines 27-36).

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jung (USPN 6,049,716) see entire document which pertains to soft swapping base stations in a CDMA system. Padovani et al (USPN 6,151,502) see entire document which pertains to soft handoffs in a wireless communication system. Satarasinghe (USPN 6,192,246) see entire document which pertains to adjusting the conditions for handoff in a soft handoff system. Grob et al (USPN 6,360,100) see entire document which pertains to soft handoff in a wireless communication system. Jou et al (USPN 6,546,248) see entire document which pertains to the generation of PSMMs in a soft handoff system. Soliman (USPN 6,055,428) see entire document which pertains to determining an active set in a soft handoff system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703)308-6743.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Daniel J. Ryman
Examiner
Art Unit 2665

DJR
Daniel J. Ryman


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